

What is claimed is:

1. A soldering method comprising the steps of: reducing the pressure of a vacuum room with a workpiece placed therein to a vacuum, said workpiece having  
5 solder thereon in the solid state consisting solely of tin or including tin and one or more components selected from silver, lead, copper, bismuth, indium and zinc;

thereafter, generating a free-radical gas in said vacuum room to remove an oxide film on said solder; and

stopping the generation of said free-radical gas to said vacuum room to  
10 make the atmosphere in said vacuum room non-oxidizing, and raising the temperature of said solder to a temperature above the melting point of said solder to thereby cause said solder to melt.

2. The soldering method according to Claim 1, wherein said solder is fixed  
15 to said workpiece, the fixing being done by forming a recess in said workpiece and placing said solder in said recess.

3. The soldering method according to Claim 1, wherein said solder is fixed  
to said workpiece, the fixing being done by the use of a flux or adhesive  
20 comprising alcohol or organic acid as a major component thereof.